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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 09/886,306

Filing Date: June 21, 2001

Appellant(s): GOPALAKRISHNAN ET AL.

Nathaniel T. Wallace
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed May 15, 2007 appealing from the Office action mailed on March 21, 2006.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

6,879,838	RANKIN ET AL	4-2005
6,125,278	WIECZOREK ET AL	9-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

1. Claims 1-7 and 9-34 are pending examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 1-4, 6, 7, 9-12, 14-20, 22-29 and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rankin et al (USPN 6,879,838) in view of Wieczorek et al (USPN 6,125,278).**

4. Per claim 9, 1, 17 and 26 (differ by statutory subject matter), *Rankin et al* teach a system for intelligent caching and network management, comprising:

- data source of event and time information (col.4 line 51-col.5 line 6, col.8 lines 40-46);
- a location database including resource information about network services, application services, devices, hardware resources and software resources that are available for the user at one or more locations (r: col.2 lines 17-52, col.4 line 3-col.5 line 30, col.6 lines 15-27, col.6 line 48-col.7 line 54; provisions for a location resource server and a location determination element for storing data pertaining to the resources available to the user at selected locations);

Rankin et al teach location prediction features in order to provide preloaded location database maps based on the time, event and resource tracking information along with the movement behavior of the user's mobile device (col.6 lines 19-27, col.7 line 55-col.8 line 46). Yet, *Rankin et al* fail to explicitly teach data source representing a user's schedule and a

predictor to predict a location of the user and additional resources needed by the user at the predicted location such that the additional resources are transferred to the user at the predicted location when and where the additional resources are needed.

However, *Wieczorek et al* teach predicting the future location of the user and allocating communication resources in anticipation of the expected resources need by the user at the predicted location and location history including the time and location information so that communication resources are allocated to support the user at that location (Figure 5, col.3 lines 1-10, col.3 line 32-col.4 line 65). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Rankin et al* and *Wieczorek et al* for the purpose of predicting the resources needed by the user in the predicted future location and allocating those resources at the predicted future location, because it provides the user with an efficient expedited content delivery system; wherein the user doesn't have to experience service delays because resources are reserved in advance according to their needs.

5. Per claims 2, 10, 18 and 27, *Rankin et al* and *Wieczorek et al* teach the system as recited in claim 1, *Rankin et al* further teach wherein the settings include a user preference profile which

includes user preferences employed by the predictor to predict a location of the user and resources needed at the location (col.4 line 51-col.5 line 26, col.8 lines 40-46).

6. Per claims 3, 11, 19 and 28, *Rankin et al* teach the system as recited in claim 2, wherein the user preferences are determined by past occurrences of user activities (col.4 line 51-col.5 line 26, col.8 lines 35-46; *Wieczorek et al*: col.3 lines 59-64).

7. Per claims 4, 12, 20 and 29, *Rankin et al* teach the system as recited in claim 2, wherein the user preference profile includes manually entered data (col.4 lines 51-56).

8. Per claims 6, 14, 22 and 31, *Rankin et al* and *Wieczorek et al* teach the system as recited in claim 1, *Rankin et al* further teach wherein the devices available include a mobile communication device, a stationary communication device or a computer (col.3 line 61-col.4 line 37; *Wieczorek et al*: col.2 lines 37-54).

9. Per claims 7, 15, 23 and 32, *Rankin et al* and *Wieczorek et al* teach the system as recited in claim 1, *Rankin et al* wherein the resources include a file, an application or data (col.5 lines 2-26, col.6 line 15-col.7 line 5; *Wieczorek et al*: col.4 line 34-col.5 line 14).

10. Per claim 16, *Rankin et al* and *Wieczorek et al* teach the system as recited in claim 9, *Wieczorek et al* further teach the system further comprising a universal messaging system coupled to the predictor, the universal messaging system being configured to provide message services in accordance with the needs of the user predicted by the predictor (Figure 5, col.3 lines 1-10, col.3 line 32-col.4 line 65).

11. Per claims 24 and 33, *Rankin et al* and *Wieczorek et al* teach the method as recited in claim 17, *Wieczorek et al* further teach the method further comprising the step of transferring the additional resources to the user at the predicted location when and where the additional resources are needed (Figure 5, col.3 lines 1-10, col.3 line 32-col.5 line14).

12. Per claims 25 and 34, *Rankin et al* and *Wieczorek et al* teach the method as recited in claim 24, *Rankin et al* further teach the method wherein the step of transferring the resources to the user includes blocking unwanted messages to the user (col.4 line 66-col.5 line 11).

13. Claims 5, 13, 21 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Rankin et al* (USPN 6,879,838) and *Wieczorek et al* (USPN 6,125,278) in view of *Takagi et al* (USPN 6,243,755).

14. Per claims 5, 13, 21 and 30, *Rankin et al* and *Wieczorek et al* teach the system, method and program storage device of claims 1, 9, 17 and 26 as applied above. *Rankin et al* and *Wieczorek et al* both teach location prediction systems based on the time, event and location behavior of the user's mobile device (*Rankin et al*: col.4 line 51-col.5 line 6, col.8 lines 40-46; *Wieczorek et al*: col.4 lines 10-17). Yet *Rankin et al* and *Wieczorek et al* fail to explicitly teach wherein the contextual information includes a user itinerary. However, *Takagi et al* teach the system as recited in claim 1, wherein the contextual information includes a user itinerary (col.8 lines 49-65 and col.12 line 29-col.13 line 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Rankin et al* with *Wieczorek et al* and *Takagi et al* for the purpose of providing a mobile user's necessary resources at the predicted future location indicated in the user's itinerary. This allows for the pre-caching and reservation of the resources so that the user will not have to wait on or request them once in the predicted location.

(10) Response to Argument

A. Appellant argues—with respect to independent claim 9—that the *Wieczorek et al* reference fails to disclose or suggest, “a predictor which receives event and time information, the event and time information representing a user's schedule...to predict a location of the user...” (see Appeal Brief pages 5-6).

In response to argument A, Examiner respectfully disagrees. As stated in the previous Office action (Final Office Action, 3/21/2006, page 4), *Wieczorek et al* teach:

“...predicting the future location of the user and allocating communication resources in anticipation of the expected resources need by the user at the predicted location and location history including the time and location information so that communication resources are allocated to support the user at that location (Figure 5, col.3 lines 1-10, col.3 line 32-col.4 line 65).”

From these teachings, it is clearly evident and obvious that the predictor system of *Wieczorek et al* is able to use a subscriber's historical activities/schedule (i.e. events, locations and times) to determine and predict a future location of a subscriber and the resources needed by the subscriber at the future location (*Abstract, col.3 lines 1-11, col.4 lines 54-59*). *Rankin et al* also disclose similar prediction abilities, by maintaining a profile of the user's movement over a certain time to predict the user's future movement (*col.8 lines 35-46*). Although *Wieczorek et al* and *Rankin et al* fail to explicitly use the word "schedule" in their disclosure, it is obvious that the time and location data used to compile the subscriber's past location information or profiles represent the subscriber's tendencies to be in a certain location at a certain time using particular resources, hence establishing a schedule. Furthermore, *Wieczorek et al* teach using the subscriber's location history for predicting the subscriber's future location and allocating the communication resources necessary for the subscriber at that location (*col.3 line 55-col.4 line 5*). Therefore, the use of the subscriber's location history is sufficient as the claimed "user's schedule" since it does provide locale and time data specific to the subscriber in order to predict the user's next move.

B. Appellant argues—with respect to independent claims 17 and 26—that the *Wieczorek et al* reference fails to disclose or suggest, "representing a user's schedule with event and time information...and predicting a location of the user and additional resources needed by the user at the predicted location based on the event and time..." (see Appeal Brief page 6).

In response to argument B, Examiner respectfully disagrees. As stated in the response to argument A above, *Wieczorek et al*'s teaching of the time and location data used to compile the subscriber's past location information adequately represents the subscriber's

tendencies to be in a certain location at a certain time using particular resources, hence establishing a schedule (*col.4 lines 6-17*). Furthermore, the suggestion to provide “additional resources” is evident in *Wieczorek et al*’s teaching of allocating communication resources that are in compliance with the subscriber’s operating protocol and operating band, as well as satisfying other operational capabilities of the subscriber unit in order to provide the best available resources to the subscriber (*col.4 line 14-col.15 line 14*). Thus the predictor system of *Wieczorek et al* makes an effort to not only provide the resources necessary for the subscriber’s unit to operate, but also makes an effort to accommodate the subscriber by allocating the best possible resources in an optimized manner.

C. Appellant argues—with respect to independent claim 1—that the *Rankin et al* and *Wieczorek et al* references fail to disclose or suggest, “a universal messaging system coupled to the predictor, wherein the universal messaging system provides message services to the user based on predictions by the predictor of current or future locations, activities or needs of a user” (see Appeal Brief pages 6-7).

In response to argument C, Examiner respectfully disagrees. *Rankin et al* disclose a location resource server that provides messages to a user for available services based on the current location, activities and request from the user (*col.4 lines 38-54, col.5 lines 3-67, col.6 line 60-col.7 line 54*). *Wieczorek et al* also teach this feature, by directing a subscriber to switch to a particular channel based on the resources available to and needed by the subscriber at a current or future location (*col.5 lines 2-14*). Thus, it is clearly evident from these teachings that the above limitation is achieved and disclosed in the cited prior art.

D. Appellant argues—with respect to dependent claims 2 and 10—that the *Rankin et al* reference fails to disclose or suggest, “a predictor for predicting resources needed...according to user preferences” (see Appeal Brief pages 7-8).

In response to argument D, Examiner respectfully disagrees. *Rankin et al* teach accessing a user’s preferences to inform the user of services of interest at a particular location (*col.4 line 38-col.5 line 67*). More specifically, push alert data is sent to the user based the user’s preferences and location determination, wherein a future location is predicted based on an algorithm that measures the user’s rate of location change (*col.7 line 25-col.8 line 34*). Furthermore, *Rankin et al* disclose using a user’s profile to predict the user’s future movement, wherein maps for the predicted locations are preloaded to the user’s device in anticipation of the user moving to a certain location (*col.8 lines 35-46*). These teachings from *Rankin et al* in combination with *Wieczorek et al*’s teachings of providing needed resources at a predicted location are sufficient in realizing and making obvious Appellant’s claimed invention with reasonable expectation of success.

For the above reasons, it is believed that the rejections should be maintained.

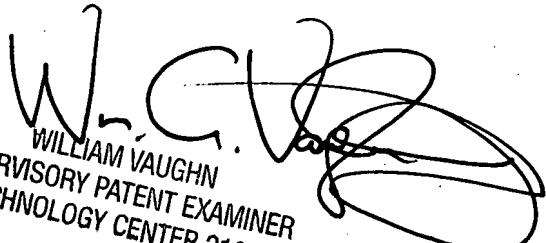
(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this Examiner's Answer.

Respectfully submitted,


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